

Environmental Risk Management

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Head of Specialty Lines, East Zone EMEA Sofia, June 12th 2014



AIG – Europe Key Facts

Global key facts

- Wholly owned subsidiary in 90 countries and jurisdictions
- ✓ Diverse business
- ✓ Scale and expertise in worldwide markets

A leading Insurer in Europe

- ✓ Operating in over 26 countries
- ✓ With over 5000 employees
- ✓ AIG UK Limited FSA regulated
- Drawing on nearly 60 years experience
- European market leader in Environmental products offerings









Nature of environmental exposures







Drivers of environmental market development in Europe

- Legal Changes, Increase in Environmental Exposure ELD, IED, other
- Environmental Liability Directive (ELD) 2004/35/EC
- Public law, enforced by EU countries
- Focus on environmental damages (Nature, water, soil, habitats) not PD/BI
- Strict liability for the most risky operations
- More onerous remediation:
 - "Primary remediation": any remedial measure which returns the damaged natural resources and/or impaired services to, or towards, baseline condition.
 - "Complementary" remediation: any remedial measure taken in relation to natural resources and/or services to compensate for the fact that primary remediation does not result in fully restoring the damaged natural resources and/or services.
 - "Compensatory" remediation: any action taken to compensate for interim losses of natural resources and/or services

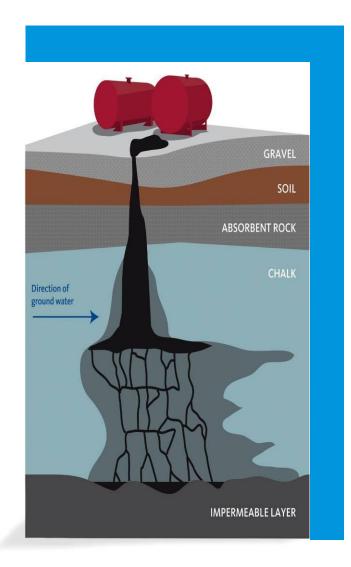


Drivers of environmental market development in Europe

- Burden of Proof/ Strict Liability
- Reputational Damage
- In-house Technical and Legal Expertise Missing
- Long Term Remediation, Long Term Financial Impact
- Employees Can Be Held Personally Liable
- Environmental Damage Even If Without Pollution
- Gaps in the traditional General Liability Coverage
 - Sudden and Accidental vs. Gradual Pollution
 - Own site clean-up
 - Historical Pollution



Gradual release











Environmental Liability Directive (ELD) & local implementation







Legal basis

- ✓ Directive 2004/35/CE of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage.
- ✓ Prevention and Remediation of Environemntal Damage Act (PREDA) (SG No 43/2008) and regulation pertaining to it:
- Regulation No 1 of October 2008 on types of preventive and remedial measures under PREDA (SG 96/2008)
- ➤ Regulation concerning the public register of operators who carry out the activities reffered to in Annex 1 to Article 3(1) of PREDA (SG No 109/23.12.2008



Prevention and Remediation of Environmental Damage Act (PREDA) (SG No 43/2008)

Competent authority

✓ The competent authority responsible for establishing and taking preventive and remedial measures and for assessing the significance of environmental damage are the directors of Regional Inspectorates of Environment and Water (RIEW).

Powers and duties of competent authority

- ✓ RIEW may require an operator to inspect, investigate and carry out studies and analyses in respect of environmental damage.
- ✓ RIEW has the power to require an operator to carry out necessary preventive measures and duty to require to carry out remedial actions.



Prevention and Remediation of Environmental Damage Act (PREDA) (SG No 43/2008)

Financial Liability

- ✓ The operators carrying out any occupational activities listed in Annex 1 shall secure the
 execution of the preventive and remedial measures through at least one of the following
 financial security instruments:
- insurance policy with no less than BGN 50,000 as sum insured
- bank guarantee
- mortgage of corporeal immovables
- pledge or receivables, movable things or securities



Regional Directorate for Environmental Protection re. clean-up works

First Part – reference to the proper legislation

Second Part –
pointing the
responsible body
remediation plans
with their deadline



REGIONALNY DYREKTOR OCHRONY ŚRODOWISKA W WARSZAWIE

WSI.510.7.2012.MGł.5



Na podstawie art. 15 ustawy z dnia 13 kwietnia 2007r. o zapobieganiu szkodom w środowisku i ich naprawie (Dz. U. Nr 75, poz. 493, ze zm., zwanej dalej "ustawą szkodową") oraz art. 104 ustawy z dnia 14 czerwca 1960r. Kodeks postępowania administracyjnego (Dz. U. z 2000 r. Nr 98, poz. 1071,

ORZEKAM

nałożyć obowiązek przeprowadzania działań naprawczych w rejonie miejsca wypadku, który miał miejsce dnia 12 stycznia 2012r. w m. Branków, gm. Warka, na Panią Renatę Tarnacką prowadzącą firmę pn. "Renata Tarnacka Usługi Transportowe" w m. Wytrzyszczki 20a, 95-045 Parzęczew, na nastepujących zasadach:

- 1. Stan do jakiego ma zostać przywrócone środowisko:
 - uzyskanie standardów jakości gleby i ziemi dla gruntów grupy "B" zgodnie z Rozporządzeniem Ministra Środowiska z dnia 9 września 2002 r. w sprawie standardów jakości gleby oraz standardów jakości ziemi (Dz. U. 2002 Nr 165, poz. 1359), na terenie działki nr ew. 312/1 w m. Branków, gm. Warka,
 - uzyskanie standardów jakości gleby i ziemi dla gruntów grupy "C" zgodnie z ww. rozporządzeniem, na terenie rowu przydrożnego przy drodze krajowej nr 731 w m. Branków, gm. Warka.
- Zakres i sposób przeprowadzenia działań naprawczych działania naprawcze będą przeprowadzone metodą "ex-situ" polegającą na:
 - kontrolowanym wydobyciu ziemi przekraczającej standardy dopuszczalne dla gruntów grupy "B" z terenu działki nr ew. 312/1 w m. Branków oraz ziemi przekraczającej standardy dopuszczalne dla gruntów grupy "C" z terenu rowu przydrożnego przy drodze krajowej nr 731 w m. Branków w miejscach, które zostały zanieczyszczone substancjami ropopochodnymi w związku z wyciekiem oleju smarowego do gruntu,
 - bezpośredni załadunek i wywóz skażonej gleby do unieszkodliwienia przez firmę posiadającą stosowne uprawnienia,
 - pobór próbek z wykopów powstałych po usunięciu skażonej gleby do analizy na zawartość oleju mineralnego oraz sumy węglowodorów aromatycznych,
 - w przypadku wyników potwierdzających usunięcie skażonej gleby w całości, wykopy zasypać gruntem czystym tj. spełniającym standardy zgodnie z ww. rozporządzeniem dla odpowiednich grup.
- Termin rozpoczęcia i zakończenia działań naprawczych od dnia otrzymania niniejszej decyzji do 31.10.2012r.

UZASADNIENIE

Pismem z dnia 14 lutego 2012r. znak: RA-IN.7054.1.2012.NK, Mazowiecki Wojewódzki Inspektor Ochrony Środowiska Delegatura w Radomiu, poinformowała tut. urząd o wynikach kontroli przeprowadzonej w rejonie wypadku, który miał miejsce w dniu 12 stycznia 2012r., na drodze nr 731 w m. Branków, gm. Warka. Z przekazanych informacji wynika, iż wskutek wypadku samochodu transportującego olej smarowy, przewożona substancja dostała się do środowiska gruntowego,



Regional Directorate for Environmental Protection re. clean-up works

Third Part – the grounds of the decision

Forth Part possibility of appeal zanieczyszczając środowisko olejem mineralnym oraz weglowodorami aromatycznymi. Zanieczyszczona została gleba w rowie przydrożnym oraz na działce nr ew. 312/1. Podmiotem odpowiedzialnym za skażenie środowiska w danym przypadku jest właściciel firmy, w ramach działalności której transportowano substancję niebezpieczną, tj. firma "Renata Tarnacka Usługi Transportowe" z siedzibą w m. Wytrzyszczki 20a, 95-045 Parzęczew.

Zgodnie z art. 2 ust. 1 pkt 1 ustawy szkodowej, ma ona zastosowanie do szkód w środowisku spowodowanych przez działalność podmiotu korzystającego ze środowiska stwarzającą ryzyko szkody w środowisku. Natomiast zgodnie z art. 3 ust. 2 pkt 1 lit. a cyt. ustawy działalność polegająca na transporcie substancji niebezpiecznych jest zaliczana do działalności stwarzającej ryzyko szkody

Wobec powyższego tut. organ, po otrzymaniu raportu Mazowieckiego Wojewódzkiego Inspektora Ochrony Środowiska Delegatura w Radomiu, pismem z dnia 22 lutego 2012r. znak: WSI.510.7.2012.MGł.1, zawiadomił Panią Renatę Tarnacką o wszczęciu postępowania w sprawie przywrócenia środowiska przedmiotowego terenu do stanu właściwego, natomiast pismem z dnia 22 lutego 2012r znak: WSL510.7.2012.MGł.2, zawiadomił Głównego Inspektora Ochrony Środowiska o wystąpieniu szkody w środowisku.

Zgodnie z art. 9 ust. 2 pkt 2 ustawy szkodowej podmiot korzystający ze środowiska, którego działalność spowodowała szkodę w środowisku, jest obowiązany do podjęcia działań naprawczych, które na mocy art. 13 ustawy należy uzgodnić z regionalnym dyrektorem ochrony środowiska, w związku z czym tut. organ wezwał pismem z dnia 22 lutego 2012r. znak: WSI.510.7.2012.MGł.3, Panią Renatę Tranacką do uzgodnienia warunków przeprowadzenia działań naprawczych z pouczeniem, iż w przypadku braku odpowiedzi na wczwanie podjęte zostaną czynności określone w ust. 15 ustawy szkodowej.

Na ww. wezwanie tut. organ nie otrzymał odpowiedzi. Pismem z dnia 29 marca 2012r. znak: WSL510.7.2012.MGł.4, tut. organ zawiadomił stronę o zakończeniu postępowania wyjaśniającego i dowodowego oraz o możliwości wniesienia uwag co do zebranej w sprawie dokumentacji. Po otrzymaniu ww. zawiadomienia Pani Renata Tarnacka nie złożyła żadnych wyjaśnień sprawie.

Biorąc pod uwagę powyższe orzeczono jak na wstępie.

Ponadto informuję, iż zgodnie z art. 19 ustawy szkodowej, w terminie 14 dni od zakończenia działań naprawczych należy przedstawić dokumentację powykonawczą z realizacji prac na ww. terenie, w której zostanie przeprowadzona analiza jakościowa- ilościowa tych prac, oraz potwierdzenie dotrzymywania standardów jakości gleby i ziemi dla odpowiednich grup gruntów zgodnie z rozporządzeniem w sprawie standardów jakości gleby oraz standardów jakości ziemi.

Jednocześnie przypominam stronie o obowiązku uregulowania stanu formalno prawnego w zakresie wytwarzania odpadów w związku z prowadzaniem działań naprawczych na ww. terenie, zgodnie z ustawą z dnia 27 kwietnia 2001r. o odpodach (Dz. U. z 2010 r. Nr 185, poz. 1243, ze zm.).

POUCZENIE

Od decyzji niniejszej służy stronie prawo wniesienia odwołania za pośrednictwem Regionalnego Dyrektora Ochrony Środowiska w Warszawie do Generalnego Dyrektora Ochrony Środowiska ul. Wawelska 52/54 w Warszawie, w terminie 14 dni od daty jej otrzymania.

REGIONALNY DYREKTOR

Renata Tarnacka Uningi Transportowe Wytrzyszczki 20a, 95-045 Parzęczew

WTOS Delegatura w Radomiu

NACZELNIK WYDZIAŁU SPECJÄL ISTA 9, 26-600 Radow POBEGANA I NAPRAWY SZKÓD W ŚRODOWISKU ORAZ INFORMACJE O ŚRODOWISKU I ZARZĄDZANIA ŚRODOWISKIEM



ELD – changes?

ELD

New EC studies hint at future toughening of ELD

Ben Norris

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[LONDON]—NEW EUROPEAN
Commission (EC) studies have
recommended potential revisions
to the Environmental Liability
Directive (ELD) now under
consideration ahead of an official
review of the directive later this
year. If incorporated into the
ELD the revisions would see a
sharpening of the polluter pays
principal enshrined in the directive
and place increased liability on
business.

REPORT DUE

The ELD originally states that the EC would submit a report to the European Parliament and Council before 30 April that shall 'include

any appropriate proposals for amendment' to the directive.

Although an EC official told Commercial Risk Europe that the April deadline will not be met, due in part to late reporting by member states and internal commission factors, he confirmed that the ELD's evaluation report will be delivered this year, potentially before summer.

The three new studies—along with two previously published, and reports from member states—provide background material for the review and therefore give insights into potential changes to the ELD.

"All three studies as well as the two 2012 studies, input from experts and stakeholders and, of course, the member state reports 2013 are being considered for



Valerie Fogleman

the Commission report this year," said the official. "I confirm that the studies will be one source of information, but of course not the only one, so will have to be assessed, considered and our

conclusions taken," he added.

The recently published studies were commissioned by the EC last year. Their main recommendations focus on the extent to which strict liability should be applied under the ELD, the interpretation and application of significant biodiversity damage, the categorisation of environmental damage, the significance thresholds for land and water damage and the optional permit and state-of-the-art defences. They also focus on the exclusion of marine and nuclear conventions and other international instruments.

'POTENTIAL REVISIONS'

The bulk of potential ELD revisions can be found in the recently

ELD: Turn to P20



Source: Commercial Risk Europe, vol.5, April 2014

Environmental Claims examples



Crude oil pipeline burst

Premises Off Site: Oil & Gas

A rupture occurred on August 7, 2009 from a crude oil transportation pipeline, into an area designated as a natural reserve (Natura 2000), home to several rare species of birds as well as small reptiles and insects in the south of France. A total of 4000 m³ of oil were released. A fatigue crack is believed to be the most likely root cause.

Potential third party claims include pollution to the water supply to neighboring towns, closure of a refinery in Switzerland due to insufficient crude oil volumes, and damage to and interruption of three other pipelines in the area.

Competent authority has been engaged as potential biodiversity damages are assessed. Criminal proceedings have also been filed,

> Potential Loss: + 20.000.000 €

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☐ Onsite Cleanup Costs ☐ Mitigation Costs ☐ Defense Costs







Oil seepage from transfer pipeline

Premises Off Site: Oil & Gas

In late April 2006, oil was found into a cable telephone manhole situated along a road nearby oil bulk storage facilities. Investigations showed that the pollution gradually developed over time from a faulty joint in a tapping located along our insured's transfer pipeline between the Port of Marseille (France), and the its storage facility.

200 m³ free product leaked overtime, being undetected as the quantity variation between in and out products remained in the acceptable ranges.

Pollution struck third parties locations; soil and water cleanup occurred, including water table continuous pumping for 6 months. Third parties claims were brought in for damages to their pipelines coatings. regulatory authorities were involved to monitor remediation.

> Actual Loss : 1.200.000 €

Coverage applicable to the above Incident:

Injury or Property Damage

✓ Offsite Cleanup Costs

☐ Mitigation Costs

☐ Business Interruption

☐ Transportation

☐ Defense Costs





Oil spill from tomato factory

Premises On & Off Site: Food processing

The insured owns and operates a plant that produces derivative tomato products in Portugal.

The plant has various equipment on site including ASTs, boilers, vapor heat exchangers, fuel oil heat exchangers and vapor water heaters.

Under normal operations, clean condensates from the oil and water heat exchangers are collected and discharged into a storm water drainage system which ultimately discharges into a nearby stream and river.

A crack developed in the piping of the fuel oil heat exchanger allowing fuel oil into the condensate, eventually affecting the nearby stream, river and vegetation. Local regulatory authorities were engaged.

> Potential Loss : 1.000.000 €

Coverage applicable to the above Incident:

✓ Offsite Cleanup

☑ Gosts Cleanup

☑ 3rd Party Bodily Injury

☑ Biodiversity Damage

☐ Mitigation Costs

☐ Business Interruption

□ Transportation

✓ Defense Costs





Extinction water pollution

Premises Off Site: Metal Recycling

The Insured owns and operates a metal recycling facility in southern France that suffered fires on two separate occasions in December 2007 and March 2008.

Samples taken to comply with discharge permit requirements revealed elevated levels of pollutants.

Further investigations showed that the fire water runoff and fire suppression materials affected the wastewater treatment equipment at the Insured's facility.

The regulatory authorities have been engaged as animals and vegetation in a nearby protected swamp were impacted.

> Potential Loss: 500.000 €

Coverage applicable to the above Incident:

 ✓ Offsite Cleanup Costs

☐ Onsite Cleanup

☐ 3rd Party Bodily Injury

or Property Damage

☑ Biodiversity Damage

Mitigation Costs

□ Business Interruption

☐ Transportation

M Defense Costs









Oil seepage from service station

Premises On Site: Transport & Logistics

The Insured runs a logistics platform in France, including trucks maintenance workshop and an inhouse service station

While performing the installation of a gasoline additive system, a contractor discovered oil seepage coming in inside a trench to be used as cables pathway.

Investigation demonstrated that oil pollution extends underneath the 50 m² paved area and further below the workshops. A gradual leak coming from the distribution pump has been found as the root cause. On site soil remediation involving bio-venting process has been assessed.

> Potential Loss: 400.000 €

Coverage applicable to the above Incident:

Offsite Cleanup Costs

Onsite Cleanup Costs

Onsite Cleanup Costs

Mitigation Costs

Defense Costs





Oil release from treatment

Contractors : Sewage water treatment

The Insured operates a wastewater treatment facility on behalf of a municipality. The treated water is discharged from the plant into a nearby river, which eventually flows into the sea.

The presence of oil was noticed inside the plant, obstructing piping and filters, and on the outflow. A downriver property owner claimed damages as a result of the release.

Investigations revealed that an industrial laundry whose wastewater is treated by the Insured's plant accidentally released heating fuel oil into its sewer damaging our Insured's facility which was unable to treat. Subrogation against the laundry has been made to recover cost of treatment plant cleaning and filter's replacements, and other third party's claims settlements.

> Potential Loss : 500.000 €

■ Mitigation Costs

☐ Onsite Cleanup Costs





Toxic cyanide release

Premises Off Site: Surface Treatment

The operator runs a surface treatment factory, working mainly for automotive industry. It employs 34 people for an annual turnover of 1.6 millions euros

In April 2005, a flexible pipe accidentally unplugged, releasing cyanide products into the line secondary containment. The next day, this waste product was pumped out to be treated into the in-house detox station. However the waste effluent were mislead in the treatment process after an operator's mistake. Untreated cyanides (20 m³ / 70 kg), were released directly into the downstream river.

Neighbors informed the local police of dead fish (2.5 tons) floating on the river surface. The detox station had to be decontaminated thoroughly. Demand of corrective actions were incurred by local authority

> Potential Loss: 200.000 €

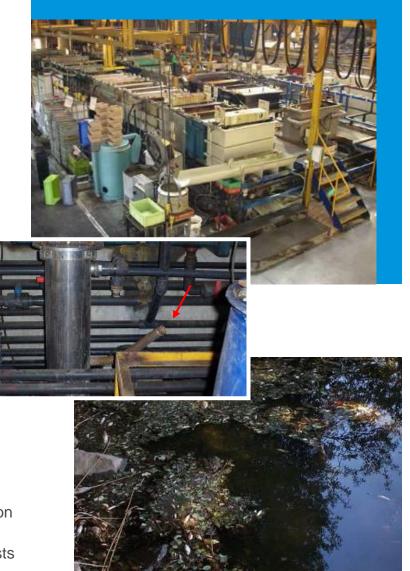
✓ 3rd Party Bodily □ Business Coverage applicable to the above Incident: Injury or Property Damage ☑ Biodiversity Damage ☐ Offsite Cleanup

☐ Transportation

☐ Defense Costs

Interruption





POLAND – damage to the black grouse (2008)

- ✓ On 7 January 2008 non governmental organization (NGO's) had notified to the competent authority the imminent threat of environmental damage and environmental damage (notification of the environmental damage).
- ✓ The area covered by the investment is located within Sites of Community Importance - Natura 2000 designated Special Protection Areas of Habitat Natura 2000 Torfowiska Gór Izerskich and Special Protection Areas of Birds Natura 2000 Góry Izerskie.
- Investment caused the destruction and damage to the habitat of the black grouse and their decrease in the area around the investment and worsening possibility of reproduction of the species.
- ✓ On 10 July 2012 Regional Director for Environmental Protection in Wrocław issued a decision imposing to investor an obligation to take preventive and remedial measures.

✓ Authority identifies in decision a number of preventive and remedial measures:

- restriction of decrease of black grouse due to reconstruct local population individuals from the breeding;
- the reduction of predators (foxes, raccoon dog);
- security of refuge of black grouse;
- -the protection of individual components of the environment.



Source: http://www.eldimplement.biois.com

2012: Ecological catastrophy on Blata River, Czech Republic

- 7 July 2012 a rupture happened in underground storage tanks containing manure in one of agricultural Cooperatives. The leaking substance flew into the sewage system and finally reached Balta River
- √ 400 m3 of the substance leaked out and, as a consequence, polluted 40 km of the river.
- The bottom of the concrete storage tank had been melted because of the high outside temperatures. 8 fish species have been killed as a result of the pollution.
- Recultivation works including microorganisms injections will last for 3 years, the minimum.
- Probably the river remediation process will be finalized within 10 years.





What is Environmental Liability Insurance?

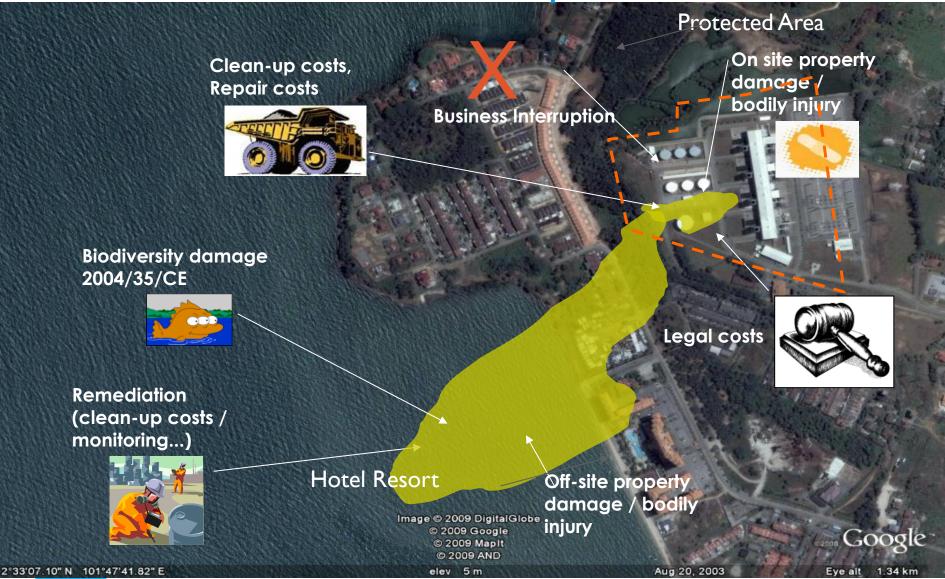


Environmental risk management, findings and conclusions

- Survey of European Risk Managers carried out in March and April 2013 (by Strategic Risk in association with AIG)
- 75% of respondents said that reputation was at the heart of their concern on environmental risk
- For 60% responders Corporate Social Responsibility policy takes into account environmental risk management as either primary or main driver, but
- Two thirds of respondents admitted they did not have specific crisis management plans in place
- 74% of risk managers who responded said they did not take account of the differences in the rules and regulations in different countries
- What is the role of environmental insurance providers in these circumstances?



Nature of environmental exposures





Environmental solutions available in Bulgaria

- Full range of European market leading products including normal business operations as well as construction/ project deployment risks
- Bespoke solutions for M&A transactions
- Multinational programmers for Bulgarian operations/ investments oversees
- Environmental Damage mitigation expense converge
- "Non-pollution" related Environmental damages converge
- Transportation related losses (including marine transportation)
- 1st party Business interruption
- Pre-Existing Conditions/ Historical pollution
- Non-owned disposal site liability



Environmental risk management – access to specialists

- PIER Europe Pollution Incident & Environmental Response
- Provides specialists in:
 - ✓ Environmental spill response and clean-up
 - ✓ Disaster recovery and restoration
 - ✓ Environmental and ecological consulting
 - ✓ Waste management & disposal
 - ✓ Investigative services including cause and origin.



- Accessible in 32 countries and with operators available 24/7/365 providing support in over 40 languages, the PIER Europe network ensures timely, reliable and comprehensive support for our Environmental policyholders.
- PIER Europe can provide access to professional communication support to help manage the public impact of the incident and minimize reputational damage.
- PIER Europe can aid the dispatch of professional responders and coordinate a comprehensive response – from major and catastrophic to minor pollution and environmental incidents.





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